

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A cellular system in a code division multiple access mode comprising:

a mobile station for measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links; and

a base station control unit for assigning unique information to the base stations thereunder and determining sequence information on the assignment,

wherein each of said base stations is operable to check a code word transmitted from the mobile station having the radio link set up and associated with said base stations unique information against a table created based on information notified by the base station control unit and determine a transmitting base station, wherein:

said base station control unit has means for notifying each base station of said base stations, in advance, of said unique information and said sequence information; and

each of said base stations has means for judging whether or not each of said base stations itself is specified as the transmitting base station by creating in advance code word candidates configured to be transmitted ~~that may~~ be transmitted by the mobile station based on said unique information and said sequence information and checking the code word received from the mobile station against said code word candidates.

2. (currently amended): A cellular system in a code division multiple access mode comprising:

a mobile station for measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links; and

a base station control unit for assigning code words and base station identifiers that are unique information to the base stations thereunder and determining sequence information on the base station identifiers,

wherein each of said base stations is operable to check the code word transmitted from the mobile station having the radio link set up against a table created based on correspondence between said assigned code words and said assigned base station identifiers and said sequence information and determine a transmitting base station, wherein:

said base station control unit has means for notifying each base station of said base stations, in advance, of said assigned code words and said assigned base station identifiers and said sequence information; and

each base station has means for judging whether or not each of said base stations itself is specified as the transmitting base station by creating in advance code word candidates configured to that may be transmitted by the mobile station based on said assigned base station identifiers and said sequence information and checking the code word received from the mobile station against said code word candidates.

3. (currently amended): The cellular system according to claim 1, wherein a maximum number of the base stations on which the mobile station is configured to may set up links is used as said sequence information.

4. (currently amended): The cellular system according to claim 1, wherein a set of the base station identifiers ~~that may be used~~ according to a maximum number of the base stations

on which the mobile station is configured to~~may~~ set up links is used as said sequence information.

5. (original): The cellular system according to claim 1, wherein the number of the base stations on which the mobile station currently has links set up is used as said sequence information.

6. (original): The cellular system according to claim 1, wherein a set of the base station identifiers used by the base stations currently having links set up is used as said sequence information.

7. (currently amended): A cellular system in a code division multiple access mode comprising:

a mobile station for measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links; and

a base station control unit for assigning code words and base station identifiers that are unique information of the base stations thereunder and determining a predetermined base station number threshold,

wherein each of said base stations is operable to check the code word transmitted from the mobile station having the radio link set up against a table created based on correspondence between said assigned code words and said assigned base station identifiers and said base station number threshold and determine a transmitting base station, wherein:

said base station control unit has means for, in the case where the mobile station sets up links with the base stations equal to or exceeding said base station number threshold,

duplicatively assigning a base station identifier to at least two of said base stations and notifying said base stations, in advance, of said duplicatively assigned base station identifier, said assigned code words and said base station number threshold; and

each of said base stations has means for, in the case where the mobile station sets up links with the base stations equal to or exceeding said base station number threshold, judging whether or not each of said base stations itself is specified as the transmitting base station by creating in advance code word candidates configured to~~that may~~ be transmitted by the mobile station based on said duplicatively assigned base station identifier and said base station number threshold and checking the code word received from the mobile station against said code word candidates.

8. (currently amended): A cellular system using a code division multiple access mode and comprising a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in a predetermined order, wherein:

said base station control unit has first means for notifying each base station of a maximum base station number that is a maximum number of the base stations which ~~may~~ have the radio links set up with said mobile station; and

said mobile station has second means for measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations,

wherein each of said base stations has third means for judging whether or not each of said base stations is specified as the transmitting base station by determining judgement candidates

that are the code words configured to~~which may~~ be transmitted by said mobile station based on said predetermined order and said maximum base station number and checking the code word received from said mobile station against said judgment candidates.

9. (currently amended): A cellular system using a code division multiple access mode and comprising a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in a predetermined order, wherein:

said base station control unit has first means for determining the base station identifiers ~~that may be used~~ according to said maximum base station number having radio links set up with said mobile station and for notifying each base station of the determined base station identifiers;

said mobile station has second means for measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

each of said base stations has third means for judging whether or not each of said base stations is specified as the transmitting base station by determining judgement candidates that are the code words configured to~~which may~~ be transmitted by said mobile station based on the determined base station identifiers and checking the code word received from said mobile station against said judgment candidates.

10. (currently amended): A cellular system using a code division multiple access mode and comprising a mobile station, base stations having radio links set up with said mobile

station and a base station control unit assigning base station identifiers to said base stations in a predetermined order, wherein:

said base station control unit has first means for notifying each base station of a link set-up base station number that is the number of said base stations having radio links set up with said mobile station;

said mobile station has second means for measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

each of said base stations has third means for judging whether or not each of said base stations is specified as the transmitting base station by determining judgement candidates that are the code words configured to ~~which may~~ be transmitted by said mobile station based on said predetermined order and said link set-up base station number.

11. (currently amended): A cellular system using a code division multiple access mode and comprising a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in a predetermined order, wherein:

said base station control unit has first means for notifying each base station of the base station identifiers assigned to said base stations;

said mobile station has second means for measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and

transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

each of said base stations has third means for judging whether or not each of said base stations is specified as the transmitting base station by determining judgment candidates that are the code words transmitted to each base station by said mobile station based on the base station identifiers assigned to said base stations.

12. (currently amended): A cellular system using a code division ~~multiple~~ access mode and comprising a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations having the radio links set up, wherein:

said base station control unit has means for, in the case where the number of said base stations is a predetermined base station number threshold or more, duplicatively assigning ~~at~~ the base station identifier that is already assigned~~used~~;

said mobile station has means for measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

each of said base stations has means for judging whether or not said each of said base stations is specified as the transmitting base station by checking the code word received from said mobile station against code words indicating combinations of said base station identifiers of said base stations.

13. (currently amended): A base station specification method in a cellular system using a code division multiple access mode, the method comprising:

measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links,

assigning unique information of the base stations thereunder and determining sequence information on the assignment,

notifying each base station of said unique information and said sequence information; and

checking a code word transmitted from a mobile station having the radio links set up and associated with said base stations unique information against a table created based on the unique information and sequence information notified by ~~the~~ base station control unit and determining a transmitting base station,

judging whether or not each of said base stations is specified as the transmitting base station by creating in advance code word candidates configured to~~that may~~ be transmitted by the mobile station based on said unique information and said sequence information and checking the code word received from the mobile station against said code word candidates.

14. (currently amended): A base station specification method in a cellular system using a code division multiple access mode, the method comprising:

measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links,

assigning code words and base station identifiers that are unique information of the base stations thereunder and determining sequence information on the base station identifiers,

notifying each base station, in advance, of said assigned code words and said assigned base station identifiers and said sequence information;

checking the code word transmitted from a mobile station having the radio link set up against a table created based on correspondence between said assigned code words and said assigned base station identifiers and said sequence information and determining a transmitting base station,

and

judging whether or not said each base station itself is specified as the transmitting base station by creating in advance code word candidates configured to~~that may~~ be transmitted by the mobile station based on said assigned base station identifiers and said sequence information and checking the code word received from the mobile station against said code word candidates.

15. (currently amended): The base station specification method according to claim 13, wherein a maximum number of the base stations on which the mobile station is configured to~~may~~ set up links is used as said sequence information.

16. (currently amended): The base station specification method according to claim 13, wherein a set of base station identifiers that ~~may be~~ used according to a maximum number of the base stations on which the mobile station is configured to~~may~~ set up links is used as said sequence information.

17. (previously presented): The base station specification method according to claim 13, wherein a number of the base stations on which the mobile station currently has links set up is used as said sequence information.

18. (original): The base station specification method according to claim 13, wherein a set of the base station identifiers used by the base stations currently having links set up is used as said sequence information.

19. (currently amended): A base station specification method in a cellular system using a code division multiple access mode, the method comprising:

measuring reception quality of pilot signals transmitted by a plurality of base stations and setting up radio links,

assigning code words and base station identifiers that are unique information corresponding to respective of the base stations thereunder and determining a predetermined base station number threshold, and

checking the code word transmitted from a mobile station having the radio link set up against a table created based on correspondence between said assigned code words and said assigned base station identifiers and said base station number threshold and determining a transmitting base station, wherein:

duplicatively assigning a base station identifier of the assigned base station identifiers to at least two of said base stations having the radio link set up and notifying said base stations, in advance, of said duplicatively assigned base station identifier, said assigned code words and said base station number threshold; and

judging whether or not each of said base stations itself is specified as the transmitting base station by creating in advance code word candidates configured to ~~that may~~ be transmitted by the mobile station based on said duplicatively assigned base station identifier and said base station number threshold and checking the code word received from the mobile station against said code word candidates.

20. (currently amended): A base station specification method in a cellular system using a code division multiple access mode and including a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in predetermined order, the method comprising:

notifying each base station of said base stations of the maximum base station number that is the maximum number of the base stations which ~~may~~ have the radio links set up with said mobile station;

measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

judging whether or not the base station is specified as the transmitting base station by determining judgment candidates that are the code words configured to which ~~may~~ be transmitted by said mobile station based on said order and said maximum base station number and checking the code word received from said mobile station against said judgement candidates.

21. (currently amended): A base station specification method in a cellular system using a code division multiple access mode and including a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in predetermined order, the method comprising:

determining the base station identifiers ~~that may be~~ used according to a maximum base station number and notifying each base station of the determined base station identifiers;

measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

judging whether or not said each of said base station is specified as the transmitting base station by determining judgment candidates that are the code words configure to~~which may~~ be transmitted by said mobile station based on the determined base station identifiers and checking the code word received from said mobile station against said judgement candidates.

22. (currently amended): A base station specification method in a cellular system using a code division multiple access mode and including a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in predetermined order, the method comprising:

notifying each base station of said base stations of ~~at~~the link set-up base station number that is the number of said base stations having links set up, instead of ~~asaid~~ maximum base station number;

measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

judging whether or not ~~at~~the base station is specified as the transmitting base station by determining judgment candidates that are the code words configured to~~which may~~ be transmitted by said mobile station based on said order and said link set-up base station number and checking the transmitted code word ~~received from said mobile station~~ against said judgement candidates.

23. (currently amended): A base station specification method in a cellular system using a code division multiple access mode and including a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in predetermined order, the method comprising:

notifying each base station of said base stations of the base station identifiers assigned to said base stations which ~~may~~ have radio links set up with said mobile station;

measuring reception quality of pilot signals transmitted by said base stations, determining one transmitting base station or a plurality of transmitting base stations out of said base stations according to measuring results thereof, and transmitting to each base station a code word indicating a combination of the base station identifiers of said transmitting base stations; and

judging whether or not the base station is specified as the transmitting base station by determining judgment candidates that are the code words configured to ~~which may~~ be transmitted by said mobile station based on the base station identifiers assigned to said base stations and checking the transmitted code word received ~~from said mobile station~~ against said judgement candidates.

24. (currently amended): A base station specification method in a cellular system using a code division ~~multiple~~ access mode and including a mobile station, base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations having the radio links set up, the method comprising:

duplicatively assigning a base station identifier that is already assigned ~~used~~;

measuring reception quality of pilot signals transmitted by said base stations,
determining one transmitting base station or a plurality of transmitting base stations out of said
base stations according to measuring results thereof, and transmitting to each base station of said
base stations a code word indicating a combination of the base station identifiers of said
transmitting base stations; and

judging whether or not said each of said base stations is specified as the
transmitting base station by checking the code word received from said mobile station against
code words indicating combinations of said base station identifiers of said base stations.